

1970

A Survey of the Effects of Mobility on Children of Career Military Personnel

Howard T. Taylor

College of William & Mary - School of Education

Follow this and additional works at: <https://scholarworks.wm.edu/etd>



Part of the [Family, Life Course, and Society Commons](#), and the [Military and Veterans Studies Commons](#)

Recommended Citation

Taylor, Howard T., "A Survey of the Effects of Mobility on Children of Career Military Personnel" (1970). *Dissertations, Theses, and Masters Projects*. Paper 1539272203.
<https://dx.doi.org/doi:10.25774/w4-pyrz-qv77>

This Thesis is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.

A SURVEY OF THE EFFECTS OF MOBILITY ON
CHILDREN OF CAREER MILITARY PERSONNEL

A Thesis

Presented to

The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts in Education

by

Howard T. Taylor, Jr.

July, 1970

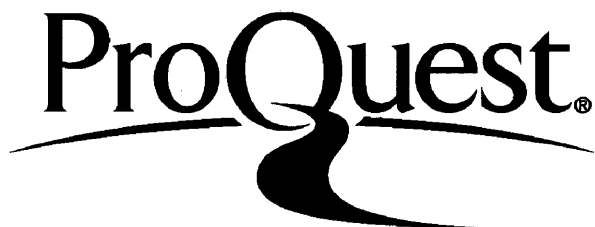
ProQuest Number: 10625123

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10625123

Published by ProQuest LLC (2017). Copyright of the Dissertation is held by the Author.

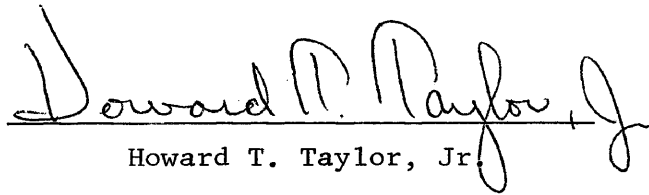
All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

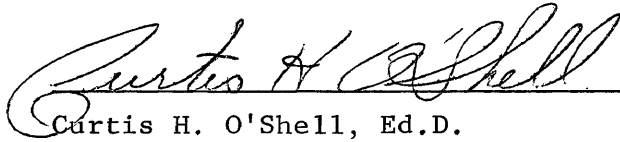
ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of
Master of Arts in Education


Howard T. Taylor, Jr.

Approved, August 1970


Curtis H. O'Shell, Ed.D.

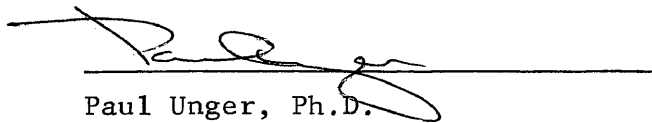

Paul Unger, Ph.D.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
Chapter	
1. INTRODUCTION	1
STATEMENT OF THE PROBLEM	1
HYPOTHESES	2
DEFINITION OF TERMS	3
DELIMITATIONS OF THE STUDY	4
2. REVIEW OF RELATED LITERATURE	5
INCIDENT OF MOBILITY	5
MOBILITY AND ACADEMIC ACHIEVEMENT	6
MOBILITY AND PERSONAL ADJUSTMENT	12
SUMMARY	15
3. DESCRIPTION OF THE INVESTIGATION	16
VALUE AND IMPORTANCE OF THE STUDY	16
DESIGN OF THE STUDY	17
FORMULATION OF THE SURVEY GROUPS	18
DESCRIPTION OF INSTRUMENTS USED	22
STATISTICAL TREATMENT	29
SUMMARY	31
4. PRESENTATION AND ANALYSIS OF DATA	33
COMPARISON OF GRADE POINT AVERAGES	33

Chapter

Page

COMPARISON OF ACHIEVEMENT TEST SCORES	36
COMPARISON OF PERSONAL PROBLEM AREAS	38
Mobile Group vs. Non-mobile Group	39
Mobile Males vs. Non-mobile Males	41
Mobile Females vs. Non-mobile Females	43
SUMMARY	46
5. SUMMARY AND CONCLUSIONS	48
THE PROBLEM AND PROCEDURES	48
PRINCIPAL FINDINGS	51
CONCLUSIONS	53
RECOMMENDATIONS	53
SUGGESTIONS FOR FURTHER RESEARCH	55
BIBLIOGRAPHY	57
APPENDIX	61
APPENDIX A	
The Mooney Problem Check List, Form H	62
APPENDIX B	
Preliminary Survey Questionnaire	66
APPENDIX C	
Socioeconomic Status Questionnaire	67

LIST OF TABLES

Table		Page
1.	Analysis of Denbigh High School's Senior Class--1970	19
2.	Incident of Mobility In the Military Sample Group	21
3.	Social Class Equivalents for ISC Ratings: Jonesville Study	28
4.	Social Class Equivalents for ISC Ratings: Sample Groups	28
5.	Comparison of Socioeconomic (ISC) Scores Between Groups	30
6.	Comparison of Grade Point Averages by Group and Sex	35
7.	Comparison of School and College Abilities Test Scores by Group and Sex	37
8.	Mobile and Non-mobile Student's Responses According to the MPCL Problem Areas	40
9.	Male Mobile and Non-mobile Student's Responses According to the MPCL Problem Areas	42
10.	Female Mobile and Non-mobile Student's Responses According to the MPCL Problem Areas	44

A SURVEY OF THE EFFECTS OF MOBILITY ON
CHILDREN OF CAREER MILITARY PERSONNEL

Chapter 1

INTRODUCTION

Interest in the problems of youth is widespread, especially in the academic and educational institutions of America. The youth of today are the resources of society and are the leaders of tomorrow. Thus, to protect these valuable assets, numerous investigations have been undertaken to determine what difficulties these youth are facing.

One such area of study is the factor of mobility. Mobility is one of the oldest and most continuous themes in American history. This event has been made easier in this country by an absence of cultural and language barriers, the accessibility of transportation and housing, and a basic continuity of social, political, educational and economical institutions throughout the land. In spite of this ease of geographical mobility, a potential problem faced by America's children is the difficulties experienced by the constant uprooting and replanting. An interest in the problems of youth cannot overlook the effects of one of the most dominant themes of America.

STATEMENT OF THE PROBLEM

The problem was to determine the effects of mobility on the academic achievement and personal adjustment of children of

military personnel in a selected public senior high school.

Specifically the following subproblems were investigated.

1. How do the military children selected for this study compare with a comparison group of non-military children in terms of grade point averages?

2. How do standardized achievement test scores of the mobile military group compare with those of a non-mobile civilian group?

3. How does the personal adjustment of the mobile military group compare with the non-mobile civilian group as rated by a self-report problem check list?

HYPOTHESES

The hypotheses to be tested by this study are:

Hypothesis 1. There is no significant difference between the mobile military group and the non-mobile civilian group as determined by grade point averages.

Hypothesis 2. There is no significant difference between the mobile military group and non-mobile civilian group as determined by the results of a standardized achievement test.

Hypothesis 3. There is no significant difference between the mobile military group and the non-mobile civilian group as determined by the number of problems indicated on a problem check list.

DEFINITION OF TERMS

The following terms are defined as they were used in the study.

Mobility. Mobility referred to the frequent geographical moves and school changes which are experienced by children of military personnel.

Non-mobility. Non-mobility referred to those civilian families whose moves, if any, were limited to within the geographical locale of this study.

Dependent military children. This group of subjects referred to children of military personnel attending the twelfth grade of the public high school utilized in this study.

Adjustment. Adjustment referred to the process of adapting to one's life situation and environment. Operationally the term referred to and was defined by the eleven problem areas of the Mooney Problem Check List.

Socioeconomic status. This term referred to the position of an individual on a continuum commonly called social class which ranges from the lower class to the upper class. Operationally this term referred to a weighted numerical value determined by the occupation and source of income of the subject's father and the residential

location and condition of the family home.

DELIMITATIONS OF THE STUDY

The data for this study were obtained from the students in one grade, the twelfth, and in one school, Denbigh High School, Newport News, Virginia. As a result of utilizing a survey method, equal groups of subjects were not used, rather the actual number of participants categorized as to their group were included. Subjects were equal as to grade level and chronological age. Distribution of sex was unequal because of the limited number of non-mobile females. Subjects were assumed to be equal in intelligence as time limitations and inadequate information in the student's permanent record files prevented the gathering of individual intelligence quotient (IQ) scores.

This study did not propose to evaluate, as such, the effectiveness of the school system used in this study. The school system chosen for this study was selected because of the availability of a large number of dependent military children in attendance. In addition, sufficient non-military children were available to provide a comparison group.

The time was limited to the period between January to May, 1970.

Chapter 2

REVIEW OF RELATED LITERATURE

This chapter presents a discussion of pertinent research and published literature which are related to the present study.

The major purpose of this chapter is to provide:

1. a synopsis of the current incident of mobility,
2. a review of literature concerning the relationship of mobility and academic achievement, and
3. a review of literature concerning personal adjustment in relation to mobility.

INCIDENT OF MOBILITY

Mobility is one of the oldest and most continuous themes in American history. During the year 1967-1968, a total of 36.6 million people, or 18.8 percent of the population changed residences. Over the past 20 years this percent has ranged from 21 to 18.3. Approximately one person in five, over the age of one, moves every year.¹

Generally most moves are connected with employment. In a study done by the U.S. Bureau of the Census, published in 1966,

¹U.S., Bureau of the Census, "Mobility of the Population of the United States: March 1967 to March 1968," Series P-20, No. 188, Current Population Reports (Washington: Government Printing Office, 1969), p. 1.

about 65 percent of the mobiles queried cited circumstances related to their jobs as the reason for moving.² Mobility studies generally show migration highest at the top and the bottom of the occupational ladder. The most mobile element of the labor force, the professional and technical workers, are twice as migratory as any other occupation.³

Since the mobility rate of the United States is so high, a pertinent question to be asked is, how does mobility affect the children of these uprooted families, particularly the children of military families? The remainder of this chapter will survey studies done in two major areas: Mobility and Academic Achievement and Mobility and Personal Adjustment.

MOBILITY AND ACADEMIC ACHIEVEMENT

The question arises as to what effect mobility has on children's academic achievement in school. Early studies, such as

²U.S., Bureau of the Census, "Reasons for Moving: March 1962 to March 1963," Series P-20, No. 154, Current Population Reports (Washington: Government Printing Office, 1966).

³Jack Ladinsky, "Occupational Determinants of Geographic Mobility Among Professional Workers," American Sociological Review 32:479-81, August, 1964.

Cromwell (1928)⁴ and Sackett (1935)⁵, concerning the relationship of mobility and school achievement tended to favor the non-mover, but little effort was made to control variables. Since the 1950s a tighter control of variables such as IQ, socioeconomic level, age, and sex have been attempted. With these controls has come the indication that moving from school to school may be harmless or even beneficial.⁶

An analysis of the cumulative school records of ninety-eight Air Force dependents indicated that mobility does not have an adverse effect upon the academic achievement. In the four subject areas studied, reading, social sciences, arithmetic and science, it was evident that the mobile students had better records.⁷

Another study dealing with military children was conducted by Partin. A project involving 524 students in the fourth, ninth and eleventh grades, half of whom were military dependents, was conducted to determine whether mobility had any effect on academic achievement or adjustment of citizenship, social development and

⁴Edwin A. Cromwell, "Comparative Study of Transient Children in Florida" (unpublished Master's thesis, George Peabody College for Teachers, 1928).

⁵E. B. Sackett, "Effects of Moving on Educational Status of Children," Elementary School Journal, 35:517-26, March, 1935

⁶Harry R. Moore, "Geographic Mobility and Performance in High School," Journal of Secondary Education, 41:326-32, November, 1966: 42:350-52, December, 1966.

⁷John W. Evans, "Effect of Pupil Mobility Upon Academic Achievement," National Elementary Principal, 45:18-22, April, 1966.

work habits. Statistical analysis determined that there was no significant difference found except in grade point averages at the ninth grade level. This difference was in favor of the non-mobile student.⁸

Stiles conducted an experiment with 138 military transient children in grades 1 through 6 to determine whether they showed any ill effects from their mobile lives in either academic achievement or emotional adjustment. A total of 45 separate tests were administered. On 33 there were no significant differences between the transients and non-transients. In almost no case did the transients excel except in first grade arithmetic. In the anxiety testing very little difference between the two groups of children was demonstrated.⁹

Farner computed correlation coefficients between mobility and individual achievement scores of 438 elementary school children who were dependents of Army and Air Force officers stationed in Japan. Of the 36 correlations computed, only 3 were negative and not significantly so. The students had moved from 1 to 11 times

⁸George R. Partin, "A Survey of the Effect of Mobility on Dependent Military Children," (unpublished Doctor's dissertation, The American University, 1963).

⁹Grace E. Stiles, "Families On the Move," Educational Forum, 32:467-74, May, 1968.

and had no significant difference in intelligence.¹⁰

A study reported by Snipes stated that mobility may be a positive factor in reading achievement in that the mobile pupils achieved a greater success in reading skills. This conclusion was based on the results of a study involving 438 sixth grade pupils in Georgia. He reported that the number of moves does not appear to have a detrimental effect and transient students tended to score higher in both reading vocabulary and comprehension.¹¹ Similar results were found by Snipes and Perrodin. They concluded that pupils moving from out of state did significantly better than the non-movers on arithmetic reasoning, arithmetic fundamentals and spelling as well as doing better than intra-county movers on reading, vocabulary, English, spelling and arithmetic.¹²

In contrast, Bollenbacher, utilizing covariance analysis to study the relationship of mobility and achievement on 5,578 sixth graders, found that reading and arithmetic achievement was not affected by mobility. This study was done in the Cincinnati Public

¹⁰ Frank Farner, "The Effect of Frequent School Changes on the Achievement of Military Dependent Children" (paper read at the Conference of the California Educational Research Association, Palo Alto, California, March 3, 4, 1961).

¹¹ Walter T. Snipes, "Effects of Moving on Reading Achievement," Reading Teacher, 20:242-46, December, 1966.

¹² Walter T. Snipes and A. F. Perrodin, "Relationship of Mobility to Achievement in Reading Arithmetic and Languages in Selected Georgia Schools," Journal of Educational Research, 59:315-19, October, 1961.

Schools and Bollenbacher has remarked that in the city a mobile child is likely to be a low achiever, but this is related to his proportionately lower ability.¹³

The above conclusion complements Frankel and Forlano's findings that mobility is a factor related to performance of the disadvantaged on standardized tests of mental ability. The authors have proposed that the consistently higher ability among the non-mover may have been a function of uninterrupted educational experience and may reflect a higher socioeconomic status, or a more stable family organization.¹⁴

Carla Fitch and Hoffer analyzed the grade point averages and standardized test scores of 1947 students who had been matched on age, IQ, socioeconomic status, sex, and grade placement. Their findings showed no significant differences between transient and non-transient students.¹⁵ Using a slightly different method, Gallagher correlated age, social class, race, sex, and mobility to

¹³Joan Bollenbacher, "Study of the Effect of Mobility on Reading Achievement," Reading Teacher, 25:356-60, March, 1962.

¹⁴Edward Frankel and George Forlano, "Mobility as a Factor In the Performance of Urban Disadvantaged Pupils On Tests of Mental Ability," Journal of Educational Research, 55:355-58, April, 1967.

¹⁵Carla Fitch and Josephine Hoffer, "Geographic Mobility and Academic Achievement of a Group of Junior High Students," Journal of Home Economics, 56:334-35, May, 1964.

academic achievement in school and found that mobility was the least significant of the variables.¹⁶

Morris, Pestaner and Nelson have attempted to formulate an explanation for the conflicting results found in mobility studies. It is their contention that the studies have not taken IQ and socioeconomic status into account systematically and that analyses have used parametric statistics which may have been affected by extreme scores. The results of their study indicate that although the mean reading scores between mobile and non-mobile students did not differ, the variation of scores obtained by mobile students was significantly higher.¹⁷

Further analysis showed that the variance was primarily contributed by the low socioeconomic group. The authors suggest that their findings support the notion that for low socioeconomic children the first move is the major dislocating one and that after the second some children recover and move into the high motivating group while others become unsettled and sink to the bottom.

¹⁶Harold B. Gallagher, "A Study of Mobility of Pupils In Relation to Achievement, Grade 6, Anderson, Indiana Public Schools, 1963-1964" (unpublished Doctor's dissertation, Ball State Teacher's College, 1965).

¹⁷J. L. Morris, M. Pestaner and A. Nelson, "Mobility and Achievement," Journal of Experimental Education, 35:74-80, Summer, 1967.

MOBILITY AND PERSONAL ADJUSTMENT

A large group of the mobile population is a captive participant in the process. The children of these families are changing residences frequently and the younger the child, the higher the annual mobility rate. It ranges from 28.9 percent for the pre-schoolers in the 1-4 age group, down to 14.5 percent for the high school student.¹⁸

Parents, educators and psychologists have expressed concern over the effects of family moves on children. Studies have been conducted to determine the influences mobility may have had on emotional factors. The potential for ill effects on children is inherent in every move. Learning to predict and prevent emotional problems likely to arise will enable parents, teachers and guidance personnel to help children successfully adjust to the move.

The findings of Gordon and Gordon indicate that ". . . each child suffers, at least temporarily, an impairment of capacity to cope with his life situation and to make interpersonal contact." If the child is already anxious about his family relationships or its stability, the feeling of helplessness, abandonment, isolation, and fear of the unknown may not disappear after the move.¹⁹

¹⁸ Current Population Reports, No. 188, p. 11.

¹⁹ R. E. Switzer and others, "The Effects of Family Moves on Children," Mental Hygiene, 45:528-36, October, 1961.

The adjustment demands which are hardest on children concern changes in family relationships rather than the move itself. The child of today is often able to accept changes in environment better than his parents. Travel and communications have caused him to be more world and space orientated.

It is not the geographic distance, but the contrast between old and new which determines the complexity of re-rooting. When moves parallel socioeconomic aspects the prevalent values and mores are readily understood and accepted. Problems are likely to arise when different patterns predominate.²⁰

A University of Illinois study of children's reactions to family moves points out that:

1. it is easier to move from a big city to a small town than vice versa;
2. the younger a child, the easier it is for him to adjust to a new community;
3. having siblings helps the transition; and
4. the third or fourth move is usually easier than the first or second.²¹

Wattenburg argues that the incident of mobility itself may affect personality because of the stress and anxiety involved. In

²⁰ Ruth Pearlman, "Uprooted Child," National Elementary Principal, 42:42, February, 1963.

²¹ "Moving, It's Tough on the Kids," Changing Times, February, 1968, p. 18.

thwarting this affect he stresses areas such as strong and supporting teacher and parent relationships with the child to aid him in making the transition smoothly.²²

Spalding, in an attempt to deal with the problems of pupils who transfer from one school to another, conducted a survey of principals and students. Both groups agreed quite closely on the degree of adjustment, differences in grades and nature of the adjustment problems. Adjustment to differences in the school was chosen as the primary problem by principals and was chosen second by the students. Difficulty in making new friends was indicated as the second most difficult adjustment problem by principals whereas the students indicated this as their primary concern in addition to leaving old friends.²³

The most recent study done in the area of personal adjustment was done by Mankowitz who used multiple correlation analyses to examine the relationship of mobility to academic achievement and self-reported personal problems of seventh grade students. His results were that mobility was unrelated to achievement and to personal problems. More specifically, his findings disclosed that mobility was not associated with either the number of school problems

²²William W. Wattenburg, "Mobile Children Need Help," Educational Forum, 12:335-42, March, 1948.

²³H. G. Spalding, "Orientation of Transfer Students to Their New School and Community," National Association of Secondary School Principals Bulletin, 41:150-53, April, 1957.

or interpersonal problems students report regardless of whether the effects of sex, socioeconomic and intellectual factors were held constant or allowed to vary.²⁴

SUMMARY

This chapter has discussed the views held and the findings of studies concerning the effects of mobility in two main areas: academic achievement and personal adjustment. Undoubtedly, some children are hurt by being moved about and others are helped. In the studies conducted thus far, the two conflicting views tend to cancel themselves out. In this sense, moving can be a grand adventure or a disaster. It can serve to enlarge the child's experience, teach him to handle challenges and face the unknown or it can result in debilitating emotional and adjustment problems which affect all portions of his life.

²⁴Marvin F. Mankowitz, "Mobility and Its Relationship to the Academic Achievement and Personal Problems of Seventh Grade Pupils" (unpublished Doctor's dissertation, Rutgers State University, 1969).

Chapter 3

DESCRIPTION OF THE INVESTIGATION

This chapter will describe the research design and methods used in the study. Areas covered will be the importance of the study, design of the study, selection of groups, instruments used, and statistical treatment of data.

VALUE AND IMPORTANCE OF THE STUDY

There are two prevailing assumptions held concerning the effects of mobility on children. The first is that these highly mobile children have become accustomed to the necessity of frequent residential change because of the very nature of their parental occupations. Thus, any subsequent adjustments are automatically smooth and without consequence to the student's school and personal life.

The second assumption is that mobility has a detrimental effect on the child's adjustment to his academic and personal life. Thus, the frequent re-establishment of the family home in an unfamiliar environment, impairs, to a certain extent, the student's abilities, academic achievements and personal adjustments.

This study may help schools in heavily impacted military areas to better understand the mobile students who are very much a part of their communities, even though it may be for short periods.

of time. Aid may be given these individuals by clearly understanding the problems which confront them as they attempt to find their place within the existing community and educational structure. Hopefully, the findings of this study will provide insight into the problems confronting school systems having similar students in their educational programs.

DESIGN OF THE STUDY

The purpose of this study was to determine the effect of mobility on the academic achievement and personal adjustment of children of military personnel. To ascertain this effect, a group of mobile military dependent students was compared with a group of non-mobile civilian students. Members of both groups were from the same grade, the twelfth, of a public high school located in a highly impacted military area. Membership within a particular comparison group was based on the results of a questionnaire given to the senior class on which the student indicated the degree of mobility personally experienced and the military or civilian employment affiliation of his father.

The grade point averages and the scores from the School and College Abilities Test were compared between the groups to determine whether any significant difference existed in the area of academic achievement. The mean number of problems indicated on a self-report problem inventory, the Mooney Problem Check List, were also compared between groups to determine whether any significant

difference existed in the area of personal adjustment. In addition, a socioeconomic status indicator, the Warner Index of Status Characteristics, was given to each group and the results compared to determine whether a significant difference existed between the groups.

The data was analyzed, using the statistical procedure involving t-tests, to determine the significance of difference at the .05, or above, level of confidence between the various means of the two groups.

FORMULATION OF THE SURVEY GROUPS

Hypothesizing that twelfth grade students would have been exposed to the greatest amount of time to the effects of mobility, this grade was used to select subjects. A questionnaire was given to all twelfth grade students which obtained information pertaining to the frequency or amount of family moves experienced and the employment affiliation of their fathers. Appendix B includes this questionnaire and Table 1 presents the results of the questionnaire.

Basically, the senior class was divided into three major groups as a result of the questionnaire. These groups were categorized as: (1) Non-mobile/Non-military, (2) Mobile/Non-military, and (3) Mobile Military. There were 92 students in the Non-mobile/Non Military Group. These students were from families whose household heads were not in the military services and which had not experienced any residential moves other than intra-city. This group

Table 1

Analysis of Denbigh High School's
Senior Class--1970

Groups	Number of cases	Percent of total population
Non-mobile/Non-military	92	31.5
Mobile/Non-military	62	21.2
Mobile/Military	138 ^a	47.3
Total	292 ^b	100.0

^aOf this total, 108 were dependents of active or retired Army personnel.

^bA total of 292 questionnaires were returned out of the current total student population of approximately 320.

comprised 31.5 percent of the population. The Mobile/Non-military Group included 62 students or 21.2 percent of the population. The fathers of these students were not affiliated with the military services; however, the family had experienced several intra-country moves. The Mobile-military Group comprised 47.3 percent of the twelfth grade. Their fathers were career members of the military services and as a result, the families had experienced several household relocations.

In utilizing the comparative survey method for this study, two groups of students were used: one group (experimental or mobile group) which had frequent school change because of military parents and a second group (comparison or control group) which had not experienced school change because of non-mobile civilian parents. The Mobile Military Group was referred to as the Mobile Group and the Non-mobile/Non-military Group was referred to as the Non-mobile Group. Because the military orientation of the survey community was predominantly that of the United States Army, only those students whose fathers were career U.S. Army personnel were included in the Mobile Group. This reduced the total of that group to 103 subjects, 51 of which were male and 52 were female. The final total of subjects for the Non-mobile Group was 85, of which 50 were male and 35 were female. The Mobile/Non-military Group was not utilized in this study.

Table 2 presents the frequency of mobility experienced by the Mobile Group. The average frequency of movement was once every

Table 2

Incident of Mobility in the
Military Sample Group

Mobility occurrence	Average frequency
Mean moves per subject	5.91 ^a
Mean frequency of moves	1:2.97 years

^aBased on a mean chronological age of 17.5 years.

2.97 years. In addition, each member of this group had changed residences and schools an average of 5.91 times in his lifetime. This figure was based on a mean chronological age of 17.5 years for this group.

DESCRIPTION OF INSTRUMENTS USED

The instruments utilized in this study for comparison purposes are described below.

Grade Point Average (GPA). It was felt that grade point averages should be used and compared in this study as a means of identifying whether or not there were any real differences between groups as far as actual school attained grades were concerned. The grade point averages used in this study were the numerical average of the cumulative academic grades received by each student in each group from the first semester of ninth grade to the end of the first semester in twelfth grade. The grade point averages were computed in accordance with this scale: A = 4, B = 3, C = 2, D = 1, F = 0.

School and College Ability Test (SCAT). This test was selected because of its overall indication of academic achievement and aptitude. The SCAT produces three scores:

1. a verbal ability score,
2. a numerical ability score, and
3. a total score resulting from a combination of the verbal and numerical scores. For this study only the total score

was utilized. This test was taken by all subjects in the spring of the eleventh grade and the scores were taken from their permanent record files for use in this study.

The reliability of this test has always been quite high. Fowler, Jackson, and Seigal indicate that with the use of the Kuder Richardson Formula 20, estimates of the total score appear to be .95 in grades 10 and 11. Their study further shows that verbal scores were at least .92 and quantitative scores were .90 or greater.²⁵

Fowler, Jackson, and Seigal, in their further comments about the SCAT series, state:

Undoubtedly SCAT is a superior test series. It clearly shows the result of careful planning, in excellent experimental program, and the use of sound up-to-date statistical procedures. It is the type of test that could hardly be produced without the cooperation of many individuals, the assistance of technical experts, and the backing of a well financed organization blessed with all the necessary facilities for the construction of a nationally standardized instrument.²⁶

Mooney Problem Check List (MPCL). This instrument was used because of its uniqueness in identifying problem areas of students, and because of the broad range of problem categories covered.

Mooney and Gordon state in the Check List Manual that:

²⁵Oscar K. Buros, (ed.), The Fifth Mental Measurement Yearbook (Highland Park, New Jersey: The Gryphon Press, 1959), p. 25. [Test review by H. M. Fowler, R. W. Jackson, and L. Seigal.]

²⁶Buros, p. 7.

The Problem Check List is not a test. It does not measure the scope or intensity of student problems in such a way as to yield a test score. There is a temptation to treat the number of items checked as a score, but such counts must be regarded only as a "census count" of each student's problems--limited by his²⁷ awareness of his problems and his willingness to reveal them.

They further conclude that the usefulness of the instrument ". . . lies in its economy for appraising the major concerns of a group and for bringing into the open the problems of each student in the group."²⁸

The MPCL, high school form, was used in testing all subjects in this study. This form consists of 330 items broken down into 11 major categories of 30 questions in each area as listed below:

<u>Category</u>	<u>Problem Areas</u>	<u>Code</u>
I	Health and Physical Development	(HPD)
II	Finances, Living Conditions, and Employment	(FLE)
III	Social and Recreational Activities	(SRA)
IV	Courtship, Sex, and Marriage	(CSM)
V	Social Psychological Relations	(SPR)
VI	Personal-Psychological Relations	(PPR)
VII	Morals and Religion	(MR)
VIII	Home and Family	(HF)

²⁷ Ross L. Mooney and Leonard V. Gordon, The Mooney Problem Check List Manual (New York: The Psychological Corporation, 1950), p. 3.

²⁸ Mooney and Gordon, p. 4.

<u>Category</u>	<u>Problem Areas</u>	<u>Code</u>
IX	The Future: Vocational and Educational	(FVE)
X	Adjustment to School Work	(ASW)
XI	Curriculum and Teacher Procedure	(CTP)

Gordon reports in an unpublished study, administered twice to 116 students, that:

The frequency with which each of the items was marked on the first administration was correlated with the frequency with which each of the same items was marked on the second administration. A correlation coefficient of .93 was found.²⁹

The conclusions from this indicates that while the MPCL is designed to reflect changing situations and experiences in the individual case, it also offers sufficient stability for group work.

For the purpose of this study this check list was deemed acceptable for the general purpose of identifying problem areas for both groups being studied and for general comparisons. It was understood that the MPCL yielded a count and not a score of traits and that this score or problem which the student identified was based on his willingness to identify items as being of concern to him at the time the student checked the problem list. A copy of the MPCL may be found in Appendix A.

Warner's Index of Status Characteristics (ISC). This index was utilized in this study to provide a simple and reliable measure

²⁹Mooney and Gordon, p. 9.

of the socioeconomic status of the subjects. The purpose in doing so was to determine if a significant difference existed between the two study groups and, if possible, what effect this difference, if any, might have on the final results of the study.³⁰

The ISC is a multiple item index or indicator of social class. It was developed by W. Lloyd Warner as a simple, economical method of obtaining the social status of an individual without a lengthy interview. The present ISC contains four items:

1. Occupation,³¹
2. Source of Income,
3. House Type, and
4. Residential Location.

The items are weighted numerically and each item contains a seven-point scale. Thus, the position within the scale is multiplied by the weight of the item producing a numerical value for that area. The four item scores are summed together and a rating of the social class is thus produced for each individual. The ISC was included in a questionnaire given to all subjects immediately before the administration of the MPCL. This questionnaire is presented in Appendix C.

³⁰W. Lloyd Warner, M. Meeker, and K. Eells, Social Class in America (New York: Harper and Row, 1949), chapters 8-14.

³¹For the purposes of this study, the occupation index was modified to include the rank or pay grade position of the military service personnel.

Warner, during his Jonesville study (1949), found a correlation of .92 between the ISC and his interview method which he termed Evaluated Participation. He additionally formulated a conversion table for the ISC total score to a social class.³² The social classes for the ISC scores are presented in Table 3.

Concerning the use of this conversion table Warner has stated: ". . . In cases where a close approximation of social class placement is sufficient . . . it may be satisfactory to use the Jonesville conversion data without checking the class dividing lines for the new community."³³ In light of the above and for ease of use in the present study, the Jonesville social class equivalents were divided into five distinct classes. This was done by equally dividing the Indeterminate and Probable areas of the original scale. Table 4 illustrates the resultant social class equivalents.

The weighted ISC scores for each student with his group were averaged and a group mean calculated. The mean score for the Mobile Group was 36.36 and the mean score for the Non-mobile Group was 41.36. These two values were subjected to a t-test to determine if a significant difference existed. The t-value was found to be 3.92 which was significant at the .001 level of confidence. This score indicates that a high degree of difference existed between the groups in socioeconomic level and this difference was in favor

³² Warner, Meeker, and Eells, p. 121.

³³ Warner, Meeker, and Eells, p. 128.

Table 3

Social Class Equivalents for ISC
Ratings: Jonesville Study

ISC weighted score range	Social class equivalents
12-17	Upper class
18-22	Upper class probably
23-24	Indeterminate
25-33	Upper middle class
34-37	Indeterminate
38-50	Lower middle class
51-53	Indeterminate
54-62	Upper lower class
63-66	Indeterminate
67-69	Lower class probably
70-84	Lower lower class

Source: W. Lloyd Warner, M. Meeker, and K. Eells, Social Class in America (New York: Harper and Row, 1949), p. 127.

Table 4

Social Class Equivalents for ISC
Ratings: Sample Groups

ISC weighted score range	Social class equivalents
12-23	Upper class
24-35	Upper middle class
36-51	Lower middle class
52-64	Upper lower class
65-84	Lower lower class

of the Mobile Group. This data is presented in Table 5.

This difference may be partially explained by the fact that the majority of the military parents were in the top strata of their pay grades, either as enlisted personnel or officers. The majority of enlisted ranks were within the grades of E-7 to E-9, all senior non-commissioned officers. The officer ranks were mainly located within the pay grades of O-4 to O-6 or major to colonel. In addition, the results of the house type and residential location questions for the military were relatively constant because of base housing facilities. However, even taking these factors into consideration, there still seemed to be a difference between the two groups.

STATISTICAL TREATMENT

Statistical analyses were performed on the data obtained from the various comparison instruments. All group data was computed for arithmetical means and standard deviations. To determine any significant difference between data, a t-test, as described by Ferguson was utilized.³⁴ T-tests were conducted between group means for GPA, SCAT scores, and items checked on the MPCL. In addition, a t-test was utilized for the comparison of group means on the ISC scores.

³⁴George A. Ferguson, Statistical Analysis In Psychology and Education (New York: McGraw-Hill Company, 1959), pp. 136-39.

Table 5

Comparison of Socioeconomic
(ISC) Scores Between Groups

Group	Number of cases	Mean ISC score	Difference of mean	t-test value
Mobile	103	36.36		
			5.22	3.92 ^a
Non-mobile	85	41.36		

^aSignificant at the .001 level.

The final statistical treatment involved the computation of Spearman's Coefficient of Rank Correlation between the ranked order of each problem area of the MPCL.³⁵ Ranking was determined by the frequency of items checked for each area.

Significance was attributed to all statistically treated comparisons at, or above, the .05 level of confidence.

SUMMARY

This chapter described the design of the study, population, groups, tests, and statistical treatments used for comparative purposes in this study.

The population was drawn from a public high school in a highly impacted military (United States Army) area. The total population consisted of the twelfth grade of this high school or approximately 320 students. As a result of a questionnaire, which determined the military or civilian employment affiliation of the family and the frequency of residential moves it experienced, two groups were formed for comparison purposes. The first group, designated as the Mobile Group, consisted of 103 subjects who were dependents of United States Army career personnel and who had experienced considerable geographic mobility in their lifetime. The comparison group, designated as the Non-mobile Group, consisted of 85 subjects who were from civilian families and who had not

³⁵Ferguson, pp. 179-83.

experienced any geographical mobility other than intra-community.

The standardized test used in this study was the School and College Abilities Test (SCAT) for a measure of aptitude and achievement. The Mooney Problem Check List (MPCL) was used as an instrument to measure areas of personal adjustment problems as defined in this study, while grade point averages (GPA) were computed to determine actual academic achievement. The Index of Status Characteristics (ISC) was used to determine the socioeconomic status of the subjects for comparison purposes.

Statistical treatment consisted of t-tests for the significant difference between group means and Spearman's Coefficient of Rank Correlation for degree of correlation among the problem areas of the MPCL. Significance was attributed to the .05, or above, level of confidence.

Chapter 4

PRESENTATION AND ANALYSIS OF THE FINDINGS

This chapter presents the findings of the study together with the analysis of data which were gathered through the procedures previously indicated. Two groups of students, one comprised of mobile military dependents ($N = 103$) and the other comprised of non-mobile civilian students ($N = 85$) were compared on the basis of grade point averages, achievement test scores, and number of problems indicated on a problem check list.

In this investigation, the significance of the difference between two means was employed. The findings of these comparisons have been discussed in three divisions, each analyzed by sex as well as total group. The first part involved the analysis of the grade point averages, the second part, the analysis of the School and College Abilities Test Scores, and the third part involved the overall total of problems indicated on the Mooney Problem Check List as well as the ranking of the eleven problems areas according to frequency of items checked within them.

COMPARISON OF GRADE POINT AVERAGES

The data necessary to provide this comparison was obtained from the student's permanent record files. The academic grades were compiled from the first semester of the ninth grade through

to the completion of the first semester of the twelfth grade and averaged for a cumulative grade point average covering a span of seven semesters of academic work. The grade point averages for the students in each group were statistically treated to form group means. These group means were then subjected to a t-test to determine any significant difference. Total means for each sex within the groups were also compiled and compared by the t-test procedure.

Table 6 presents the results of the total group comparisons and comparisons by sex between groups. The mean GPA for the Mobile Group was found to be 2.35 and the mean GPA for the Non-mobile Group was 2.14. A t-test analysis on these two means produced a t-value of 1.985 which was significant at the .05 level of confidence. Thus, it can be said that a significant difference exists between the subjects in the Mobile and Non-mobile Groups and that this difference favored the Mobile Group.

Comparisons of grade point averages between the male subjects from both groups yielded mean GPAs of 2.36 for the Mobile male students and 1.94 for Non-mobile male students. The t-test analysis on these two means produced a value of 2.776 which was significant at the .01 level of confidence. Thus, there appeared to be a relatively high and significant difference between the male students of the Mobile and Non-mobile Groups and that this difference again favored the Mobile Group.

In the comparison of the females from both groups, the mobile subjects had a mean GPA of 2.36 and the non-mobile subjects had a

Table 6
Comparison of Grade Point Averages
by Group and Sex

Groups	Number of cases	Mean grade point averages	Difference of means	t-test values
Mobile Group	103	2.35		
Non-mobile Group	85	2.14	-.35	1.985 ^a
Mobile Males	51	2.36		
Non-mobile Males	50	1.94	-.42	2.776 ^b
Mobile Females	52	2.36		
Non-mobile Females	35	2.45	.09	0.627

^aSignificant at the .05 level.

^bSignificant at the .01 level.

mean of 2.45. The t-test value for the difference between these two means was 0.627 which was not significant; thus, no difference existed between the mean GPAs of the female subjects.

The analysis of data involving grade point averages showed that a significant difference at the .05 level existed between the two group means and the difference was in favor of the Mobile Group. Furthermore, there was a significant difference at the .01 level between means of the male subjects from both groups. This difference again favored the Mobile Group. No significant difference was found between the means of female subjects from both groups.

COMPARISON OF ACHIEVEMENT TEST SCORES

The instrument utilized for this comparison was the School and College Abilities Test which was administered to all subjects in the spring semester of their eleventh grade. Only the combined total score from this test was utilized and means for each total group and sexes within the groups were tabulated.

Table 7 presents the results for the comparison of SCAT scores. The mean score for the Mobile Group was 290.49 and the mean score for the Non-mobile Group was 287.06. A t-test analysis on these two means resulted in a t-value of 1.504 which was not significant. Thus, no difference existed between the Mobile and Non-mobile Groups for SCAT scores.

The analysis of mean SCAT scores for the male subjects in both groups produced a mean of 293.43 and 284.80 for the Mobile and

Table 7

Comparison of School and College Abilities
Test Scores by Group and Sex

Groups	Number of cases	Mean SCAT score	Difference of means	t-test values
Mobile Group	103	290.49		
Non-mobile Group	85	287.06	-3.43	1.504
Mobile Males	51	293.43		
Non-mobile Males	50	284.80	-8.63	2.963 ^a
Mobile Females	52	287.56		
Non-mobile Females	35	293.14	5.58	1.323

^aSignificant at the .01 level.

Non-mobile Groups, respectively. The t-value computed for the difference between these two means was found to be 2.963. This value was significant at the .01 level of confidence and indicated that a significant difference existed between the SCAT scores of the males from both groups. This difference was in favor of the mobile male subjects.

A mean SCAT score of 287.56 was found for the mobile female subjects whereas the non-mobile female subjects had a mean score of 293.14. The t-test value for the difference between these two means was computed at 1.323 which was not significant. Thus, there was no difference between the mean scores of the female members of both groups.

The analysis of data by t-test for SCAT scores indicated that no significant differences existed between the Mobile and Non-mobile Groups, and between the female members of both groups. A significant difference was found between the male members of both groups. This difference was significant at the .01 level of confidence and it favored the males of the Mobile Group.

COMPARISON OF PERSONAL PROBLEM AREAS

The data utilized for this analysis were the results of the Mooney Problem Check List, Form H, which was administered to all subjects in the spring of their twelfth grade. The total number of items checked by each subject within each group were totaled and averaged for a mean group score. The mean number of items checked

were also tabulated by sex within each group. The eleven problem areas within the MPCL were ranked according to the total number of items checked within them. This was done for the Mobile Group versus the Non-mobile Group, the Mobile Males versus Non-Mobile Males and Mobile Females versus Non-mobile Females.

Mobile Group vs. Non-mobile
Group

Table 8 presents the analysis of data gathered on all subjects in the Mobile and Non-mobile Groups. The mobile students had a mean number of items checked of 43.55 while the Non-mobile students averaged 41.61. The t-test value for the degree of difference between these two means was found to be 0.344 which was not significant; thus, no significant difference existed between group means for the MPCL.

An overview of the rankings of the eleven problem areas showed concurrence between both groups on the first five areas. Both Mobile and Non-mobile Groups ranked the following problem areas in this order:

1. "Curriculum and Teaching Procedure";
2. "Personal-Psychological Relations";
3. "Adjustment to School Work";
4. "Social-Psychological Relations"; and
5. "Home and Family."

The largest difference between the ranking of any two problem areas was approximately four places. The mobile students ranked "Finances,

Table 8

Mobile and Non-mobile Student's Responses
According to the MPCL Problem Areas

Problem areas	Mobile group			Non-mobile group		
	No.	(%)	Rank	No.	(%)	Rank
HPD	317	7.0	11	263	7.4	9
FLE	327	7.2	10	301	8.5	6
SRA	333	7.5	9	268	7.6	8
CSM	370	8.2	7	254	7.1	11
SPR	445	9.8	4	316	9.0	4
PPR	521	11.6	2	413	12.0	2
MP	409	9.0	6	292	8.2	7
HF	427	9.4	5	303	8.6	5
FVE	360	7.9	8	258	7.2	10
ASW	473	10.5	3	402	11.3	3
CTP	542	11.9	1	465	13.1	1
Total	4,524	100.0		3,535	100.0	
Mean	43.55			41.61		
N	103			85		
SD	28.40			37.03		

$$t = 0.394$$

$$r = .81$$

Living Conditions, and Employment" as the tenth most serious problem while the non-mobile students ranked it in sixth place. This placement tends to reflect the results of the socioeconomic comparison between groups in that the Mobile Group was significantly higher in socioeconomic level than was the Non-mobile Group.

Spearman's Coefficient of Rank Correlation was computed for the ranking of the problem areas. A correlation coefficient of .81 was found between the rankings of the two groups which indicated a high degree of correlation among the degree of concern within the problem areas for both mobile and non-mobile students.

Mobile Males vs. Non-mobile
Males

The results of the comparisons between the male students from both groups are presented in Table 9. The mobile male students had a mean number of items checked of 42.49 while the non-mobile males had a mean of 36.60. The t-test value for the difference between these two means was calculated at 0.877 which was not significant. Thus, there was no significant difference between the total number of items checked on the MPCL by the male subjects of both groups.

The rankings of the problem areas by the male subjects were not as cohesive as they were for the total groups. The male subjects agreed on the order of concern for four problem areas. These areas are as follows:

1. "Curriculum and Teaching Procedure," ranked first;
2. "Adjustment to School Work," ranked second;

Table 9

Male Mobile and Non-mobile Student's Responses
According to the MPCL Problem Areas

Problem areas	Mobile male subjects			Non-mobile male subjects		
	No.	(%)	Rank	No.	(%)	Rank
HPD	152	7.01	10	136	7.01	8
FLE	150	6.91	11	149	8.13	5
SRA	169	7.79	9	134	7.31	11
CSM	178	8.20	7	139	7.59	7
SPR	187	8.62	6	158	8.63	4
PPR	240	11.06	3	189	10.32	3
MR	209	9.63	4	185	7.37	9
HF	199	9.17	5	132	7.21	10
FVE	171	7.88	8	142	7.75	6
ASW	245	11.29	2	240	13.10	2
CTP	270	12.44	1	278	15.18	1
Total	2,170	100.0		1,832	100.0	
Mean	42.49			36.60		
N	51			50		
SD	30.91			36.29		

$$t = 0.877$$

$$r = .54$$

3. "Social-Psychological Relations," ranked third; and
4. "Courtship, Sex and Marriage," ranked seventh.

The greatest difference of ranking was again "Finances, Living Conditions and Employment." The mobile male subjects ranked it as the problem of least concern (eleventh place) whereas the non-mobile males ranked it considerably higher (fifth place). This placement again indicates the difference in socioeconomic level between the two groups.

Spearman's Coefficient of Rank Correlation was computed for the ranking of the problem areas of these male students. A correlation coefficient of .54 was found which indicated a fair degree of correlation between the male subjects on the problem areas, however, it was not as great as the correlation found between total groups.

Mobile Females vs. Non-mobile Females

The results of the comparisons between the female members of both groups on the MPCL are presented in Table 10. The mobile female students had a mean number of items checked of 44.60 and the non-mobile females had a mean of 48.77. The t-test value for the difference between means was calculated to be 0.573 which was not significant. It was concluded on the basis of this value that no difference existed in the number of personal problems indicated between the female members of the Mobile and Non-mobile Groups.

The mobile female students ranked the following five areas

Table 10

Female Mobile and Non-mobile Student's Responses
According to the MPCL Problem Areas

Problem areas	Mobile female subjects			Non-mobile female subjects		
	No.	(%)	Rank	No.	(%)	Rank
HPD	165	7.01	10	127	7.46	9
FLE	177	7.52	9	152	8.93	7
SRA	164	6.97	11	134	7.87	8
CSM	192	8.16	8	115	6.75	11
SPR	258	10.96	3	158	9.29	5
PPR	281	11.94	1	224	13.15	1
MR	200	8.50	6	157	9.22	6
HF	228	9.69	4.5	171	10.04	3
FVE	189	8.03	7	116	6.81	10
ASW	228	9.69	4.5	162	9.51	4
CTP	272	11.56	2	187	10.98	2
Total	2,354	100.0		1,703	100.0	
Mean	44.60			48.77		
N	52			35		
SD	29.94			37.42		

$$t = 0.573$$

$$r = .82$$

of those of most concern:

1. "Personal-Psychological Relations";
2. "Curriculum and Teaching Procedures";
3. "Social-Psychological Relations"; and

Tied for 4 and 5. "Adjustments to School Work" and "Home and Family."

The non-mobile female students ranked these following five areas as those of most concern:

1. "Personal-Psychological Relations";
2. "Curriculum and Teaching Procedures";
3. "Home and Family";
4. "Adjustment to School Work"; and
5. "Social-Psychological Relations."

Spearman's Coefficient of Rank Correlation was computed for the ranking of the problem areas. A correlation coefficient of .82 was found which indicated a high degree of correlation between the female students of both groups as to their problem areas.

The analysis of data from the results of the MPCL indicated that there was no significant difference between the comparison groups as to the number of problems indicated. T-test values of 0.394, 0.877, and 0.573 were found for the difference between means of the Mobile versus Non-mobile Groups, Mobile Males versus Non-mobile Males and Mobile Females versus Non-mobile Females, respectively. Correlation between the rankings of problem areas according to frequency of items checked within the area were quite close

between the total groups ($r = .81$) and the females from both groups ($r = .82$). Correlation was found to be .54 for the choices of male students from both groups. Based on these correlations it seems that there is little difference as to the degree of concern among the problem areas. Both Mobile and Non-mobile Groups indicated the same five areas as their first five areas of concern.

SUMMARY

This chapter presented the statistical treatment of the data plus the essential findings of the study. The results of the study presented in this chapter generally indicated that there was no difference between children who have had mobile lives and those who have not. The incidences of significant differences that did occur were in favor of the mobile students.

The Mobile Group scored significantly higher than the comparison group of non-mobile students in the area of mean grade point averages. Within these groups the mobile male students also scored significantly higher than did the non-mobile male students. There was no difference between females of both groups.

There was no significant difference found between the comparison of SCAT scores for the two groups. However, the males of the Mobile Group did score significantly higher than their counterparts in the Non-mobile Group. No difference was found between the female members of the two groups.

There was no significant difference in the mean number of

problems indicated on the MPCL between the two comparison groups. Neither was there any significant difference between the sexes of the groups. Both comparison groups also ranked the problem areas quite closely as to degree of concern shown by the total number of items checked within a problem area. Both groups agreed on the same five problem areas for the first five areas of concern.

The following chapter summarizes the study and presents the major conclusions derived from the investigation.

Chapter 5

SUMMARY AND CONCLUSIONS

Many assumptions have been made regarding the effect upon children being raised in a family such as those in the military service which are required to travel frequently. The inconclusive research concerning such effects combined with an increasing number of families on the move, indicates a need to further investigate school achievement and personal adjustment of children from mobile families. Generally, the assumptions of research indicate mobility may be either beneficial or detrimental. Starting with these assumptions, the basic hypotheses of this study were developed. This study was an attempt to make a contribution to additional understanding of the effect of mobility on children.

THE PROBLEM AND PROCEDURES

The purpose of this study was to determine the effect of mobility on the academic achievement and personal adjustment of children of military personnel in a selected public high school.

For the purposes of this study mobility referred to the frequent geographical moves and changes of school which are experienced by children of career military personnel. Non-mobility referred to those civilian families whose moves, if any, were limited to within the geographical locale of this study. Adjustment

referred to the process of adapting to one's life situation and environment. Operationally the term was defined by the eleven problem areas of the Mooney Problem Check List.

The investigation was undertaken to determine whether or not there were any significant differences between the school achievement and personal adjustment of students who lived in a mobile military family, identified as the Mobile Group and a comparison group of classmates who lived in a non-mobile civilian family, identified as the Non-mobile Group. Comparisons were also made between males in mobile and non-mobile families and females in mobile and non-mobile families.

Students involved in the study were all members of the senior class in the same high school. The twelfth grade was chosen as it was reasoned that the mobile students of this class would have been exposed to the greatest amount of mobility. Selections for the comparison groups were based on the results of a questionnaire given to the senior class on which the student indicated the degree of mobility experienced and the military or civilian affiliation of his father. Subjects were identical as to chronological age, grade and school. Students could not be matched for intelligence as time limitations and inadequate information in the student's permanent record prevented the obtaining of IQ scores. However, for the purposes of this study, it was assumed that distribution was normal. In addition, a socioeconomic rating was gathered for each student. Mobile students had a significantly higher

socioeconomic level than did non-mobile students.

The study and solution of the problem involved the following steps:

1. Surveying by questionnaire, the twelfth grade class of a high school in a highly impacted military area to determine military or civilian affiliation and degree of mobility experienced.

2. Identifying the students from this twelfth grade who were from families the heads of which served in the United States Army, and identified as the Mobile Group.

3. Identifying the students, for use as a comparison group, who were from non-mobile civilian families, and identified as the Non-mobile Group.

4. Completing a questionnaire containing a socio-economic status index by both groups.

5. Comparing grade point averages of the students in the Mobile Group with those of students in the Non-mobile Group.

6. Comparing mean School and College Abilities Test scores of students in the Mobile Group with those of students in the Non-mobile Group.

7. Comparing the mean number of problems indicated on the Mooney Problem Check List by students in the Mobile Groups with those indicated by students in the Non-mobile Group.

8. Analyzing the data, using the statistical procedure involving t-tests, to determine the significance of difference at the .05, or above, level of confidence between the means of the two

groups.

9. Drawing conclusions from the t-tests of differences in mean grade point averages, mean achievement scores, mean number of personal problems and mean socioeconomic level at or above the .05 level of confidence between the Non-mobile and Mobile Groups.

PRINCIPAL FINDINGS

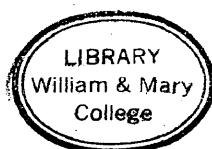
Analysis of the data was accomplished and the following findings were applied to the three hypotheses as proposed and stated in chapter one.

Hypothesis 1. There is no significant difference between the mobile military group and non-mobile civilian group as determined by grade point average.

This study showed that a significant difference existed when grade point averages were compared as indicated by the rejection of the null hypothesis at the established level of significance. The comparison of grade point averages between the male students from both groups was significant at the .01 level of confidence. This difference favored the mobile male students. The null hypothesis was accepted for the females from both groups as no significant difference was found.

Hypothesis 2. There is no significant difference between the mobile military group and the non-mobile civilian group as determined by the results of a standardized achievement test.

No significant difference was found between the comparison



groups as to their scores on the School and College Abilities Test; thus, the null hypothesis was accepted. However, a significant difference at the .01 level was found in a comparison of SCAT scores for the male subjects from both groups. The difference favored the Mobile male students. No significant difference was found between female students of both groups as to their scores on the SCAT.

Hypothesis 3. There is no significant difference between the mobile military group and non-mobile civilian group as determined by the number of problems indicated on a problem check list.

The analysis of the mean number of problems indicated on the MPCL between the comparison group showed no significant difference; thus, the null hypothesis was accepted. No significant differences were found between the male students of both groups and the female students of both groups as to the number of personal problems indicated.

A comparison of the rankings of the eleven problems according to the total items checked for both groups showed a high degree of agreement ($r = .81$). Both groups identified the same five problem areas for the first five areas of concern. Problem area rankings for the male students were lower ($r = .54$) with agreement on four of the eleven problem areas as to placement according to degree of concern. Problem area rankings for the female members of both groups were similar to those of the total groups ($r = .82$). The first two areas of concern were identical.

CONCLUSIONS

The findings of this investigation as described in this paper have shown that there is no significant difference between students who lead mobile lives and students who do not, except in the area of grade point averages. However, upon close examination of the subjects, there is an indication that the male students from the Non-mobile Group were generally lower in academic ability than were the rest of the subjects. This difference in ability has reflected itself in grade point average and SCAT score comparisons concerning the male non-mobile students. As a result of this lower ability level the results of the study concerning academic achievement may have been seriously affected.

The results of the Mooney Problem Check List showed no significant difference of problem areas between mobile and non-mobile students which tends to support the theory that readjustment because of a geographical move is generally not difficult for the mobile student.

The results of the survey generally agreed with the stated hypothesis proposed in chapter one with the exception of the grade point average comparison as mentioned above.

RECOMMENDATIONS

In those schools where a sizable segment of the population is from mobile families, the school program should be concerned with

identifying those students from such homes and providing necessary guidance services for these children. Of particular importance is the question, how can the school help provide a sense of continuity and security to these students as they move into new and strange academic environments?

One suggestion might be to provide a "buddy system" where a local student is requested on a voluntary basis to assist the newly arrived student in becoming adjusted to school policies and procedures. One reason why mobile students may find it difficult to adjust is the lack of knowledge about local regulations. Because of their ignorance of the local policy they may appear as problem children.

Other suggestions that might possibly contribute to the better adjustment of mobile students are individual and group counseling of all new arrivals from outside the school system. At this time, a common level of understanding can be fostered by indicating those policies and expectations which are peculiar to the school system involved. A brochure or "student handbook" containing information about the school might also be provided each new student. Consideration should also be given to the practice of administering some form of a personal adjustment inventory to all new arrivals in the school systems. This would help bring to light any adjustment problems experienced by the student.

A final suggestion might be for individual teachers to identify students newly arriving in the school and to pay particular attention

to the adjustment needs of these students and their academic level within a certain subject or field. Close cooperation between the teacher and guidance staff is necessary to assure that the student is placed in his appropriate level. Teachers should realize that the mobile student may have a different perspective than the non-mobile student and that she is probably in the best position to assist such mobile students in making a satisfactory adjustment.

SUGGESTIONS FOR FURTHER RESEARCH

It is suggested that the following areas be considered for further research:

1. Repeat the present study using closer control of variables such as IQ and socioeconomic level of the comparison groups.
2. Repeat the present study using different population levels and larger samples. Lee Hall Elementary School, which is near the Fort Eustis military post, is predominantly composed of military mobile students and could be compared with another elementary school which does not have a large mobile population.
3. Compare students' self-appraisal of personal and social adjustments with those made by school personnel on the same traits.
4. Another study would be most beneficial using the children of mobile groups other than the military. Such a study would indicate whether the results of this study would be the same

for other groups of mobile children or whether they are peculiar only to the military. Several groups which might be used are the children of migratory workers, civilian employees of the Federal Government, or parents who travel in connection with private business.

5. Further studies should be made in other communities where a larger or smaller number of mobile students can be found. There may be some relationship between the number of mobile students and the resultant effects on achievement and adjustment.

6. A study should be developed in which the many factors associated with mobility are more closely identified and related to problems in education.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. BOOKS

- Barber, Bernard. Social Stratification. New York: Harcourt World and Brace, 1957.
- Buros, Oscar K., (ed.). The Fifth Mental Measurements Yearbook. Highland Park, New Jersey: The Gryphon Press, 1959.
[Test Review by H. M. Fowler, R. W. Jackson, and L. Seigal.]
- Ferguson, George A. Statistical Analysis In Psychology and Education. New York: McGraw-Hill Company, 1959.
- Mooney, Ross L., and Leonard V. Gordon. The Mooney Problem Check List Manual. New York: The Psychological Corporation, 1950.
- Rossi, Peter H. Why Families Move. Glencoe, Illinois: Free Press, 1955.
- Warner, W. Lloyd, M. Meeker, and K. Eells. Social Class In America. New York: Harper and Row, 1949.
- _____, and Paul S. Lunt. The Social Life of a Modern Community. New Haven, Connecticut: Yale University Press, 1941.

B. PERIODICALS

- Bollenbacher, Joan. "Study of the Effect of Mobility on Reading Achievement," Reading Teacher, 25:356-60, March, 1962.
- Calvo, R. C. "Helping the Mobile Child in School," Phi Delta Kappan, 50:487, April, 1969.
- Evans, John W. "Effect of Pupil Mobility Upon Academic Achievement," National Elementary Principal, 45:18-22, April, 1966.
- Fitch, Carla, and Josephine Hoffer. "Geographic Mobility and Academic Achievement of a Group of Junior High Students," Journal of Home Economics, 56:334-35, May, 1964.

- Frankel, Edward, and George Forlano. "Mobility As a Factor In the Performance of Urban Disadvantaged Pupils On Tests of Mental Ability," Journal of Educational Research, 55:355-58, April, 1967.
- Ladinsky, Jack. "Occupational Determinants of Geographic Mobility Among Professional Workers," American Sociological Review, 32:479-81, August, 1964.
- Moore, Harry R. "Geographic Mobility and Performance In High School," Journal of Secondary Education, 41:326-32, November, 1966: 42:350-52, December, 1966.
- Morris, J. L., M. Pestaner, and A. Nelson. "Mobility and Achievement," Journal of Experimental Education, 35:74-80, Summer, 1967.
- "Moving, It's Tough On the Kids," Changing Times, February, 1968, p. 18.
- National Education Association Research Division. "America on the Move," National Education Association Research Bulletin, 36:99-102, December, 1958.
- Pearlman, Ruth. "Uprooted Child," National Elementary Principal, 42:42-45, February, 1963.
- Sackett, E. B. "Effects of Moving On Educational Status of Children," Elementary School Journal, 35:517-26, March, 1935.
- Snipes, Walter T. "Effects of Moving On Reading Achievement," Reading Teacher, 20:242-46, December, 1966.
- _____, and A. F. Perrodin. "Relationship of Mobility to Achievement In Reading, Arithmetic and Languages In Selected Georgia Schools," Journal of Educational Research, 59:315-19, October, 1961.
- Spalding, H. G. "Orientation of Transfer Students To Their New School and Community," National Association of Secondary-School Principals Bulletin, 41:150-53, April, 1957.
- Stiles, Grace E. "Families On the Move," Educational Forum, 32:467-74, May, 1968.
- Switzer, R. E., and others. "The Effects of Family Moves On Children," Mental Hygiene, 45:528-36, October, 1961.
- Wattenburg, William W. "Mobility Children Need Help," Educational Forum, 12:335-42, March, 1948.

C. PUBLIC DOCUMENTS

- U.S. Bureau of the Census. "Mobility of the Population of the United States: March 1967 to March 1968," Series P-20, No. 154. Current Population Reports. Washington: Government Printing Office, 1966.
- U.S. Bureau of the Census. "Reasons for Moving: March 1962 to March 1963," Series P-20, No. 154. Current Population Reports. Washington: Government Printing Office, 1966.

D. UNPUBLISHED MATERIALS

- Bulloch, Sarah I. "A Study of the Impact of Guidance Services on 12th Grade Students As Measured by the Mooney Problem Check List." Unpublished Master's thesis, University of Tennessee, 1960.
- Cromwell, Edwin A. "Comparative Study of Transient Children in Florida." Unpublished Master's thesis, George Peabody College for Teachers, 1928.
- Farner, Frank. "The Effect of Frequent School Change On the Achievement of Military Dependent Children." Paper read at the Conference of the California Education Research Association, Palo Alto, California, March 3-4, 1961.
- Gallagher, Harold B. "A Study of Mobility of Pupils In Relation to Achievement, Grade 6, Anderson, Indiana Public Schools, 1963-1964. Unpublished Doctor's dissertation, Ball State Teacher's College, 1965.
- Mankowitz, Marvin F. "Mobility and Its Relationship to the Academic Achievement and Personal Problems of Seventh Grade Pupils." Unpublished Doctor's dissertation, Rutgers State University, 1969.
- Mooney, Ross L., and Leonard V. Gordon. "The Mooney Problem Check List Manual." New York: The Psychological Corporation, 1950. [Booklet.]
- Partin, George R. "A Survey of the Effect of Mobility of Dependent Children." Unpublished Doctor's dissertation, The American University, 1963.

APPENDIX

10

APPENDIX A

MOONEY PROBLEM CHECK LIST

ROSS L. MOONEY

Bureau of Educational Research
Ohio State University

 HIGH
SCHOOL
FORM
1950
REVISION

Age.....Date of birth.....Boy.....Girl.....

Your class, or the number
of your grade in school.....

Name of school.....

Name of the person to whom
you are to turn in this paper.....Your name or other identification,
if desired.....

Date.....

DIRECTIONS

This is not a test. It is a list of problems which are often troubling students of your age—problems of health, money, social life, home relations, religion, vocation, school work, and the like. Some of these problems are likely to be troubling you and some are not. As you read the list, pick out the problems which are troubling you. There are three steps in what you do.

First Step: Read through the list slowly, and when you come to a problem which suggests something which is troubling you, underline it. For example, if you are troubled by the fact that you are underweight, underline the first item like this, "1. Being underweight." Go through the whole list in this way, marking the problems which are troubling you.

Second Step: When you have completed the first step, look back over the problems you have underlined and pick out the ones which you feel are *troubling you most*. Show these problems by *making a circle* around the numbers in front of them. For example, if, as you look back over all the problems you have underlined you decide that "Being underweight" is one of those which troubles you most, then make a circle around the number in front of the item, like this, "①. Being underweight."

Third Step: When you have completed the second step, answer the summarizing questions on pages 5 and 6.



Copyright 1950. All rights reserved.

The Psychological Corporation
304 East 45th Street, New York 17, N. Y.

Cir.	Tot.
HPD	
FLE	
SRA	
CSM	
SPR	
PPR	
MR	
HF	
FVE	
ASW	
CTP	
TOTAL . . .	

1. Being underweight
2. Being overweight
3. Not getting enough exercise
4. Getting sick too often
5. Tiring very easily
6. Needing to learn how to save money
7. Not knowing how to spend my money wisely
8. Having less money than my friends have
9. Having to ask parents for money
10. Having no regular allowance (or income)
11. Slow in getting acquainted with people
12. Awkward in meeting people
13. Being ill at ease at social affairs
14. Trouble in keeping a conversation going
15. Unsure of my social etiquette
16. Having dates
17. Awkward in making a date
18. Not mixing well with the opposite sex
19. Not being attractive to the opposite sex
20. Not being allowed to have dates
21. Getting into arguments
22. Hurting people's feelings
23. Being talked about
24. Being made fun of
25. Being "different"
26. Losing my temper
27. Taking some things too seriously
28. Being nervous
29. Getting excited too easily
30. Worrying
31. Not going to church often enough
32. Not living up to my ideal
33. Puzzled about the meaning of God
34. Doubting some of the religious things I'm told
35. Confused on some of my religious beliefs
36. Worried about a member of the family
37. Sickness in the family
38. Parents sacrificing too much for me
39. Parents not understanding me
40. Being treated like a child at home
41. Unable to enter desired vocation
42. Doubting the wisdom of my vocational choice
43. Needing to know my vocational abilities
44. Doubting I can get a job in my chosen vocation
45. Wanting advice on what to do after high school
46. Missing too many days of school
47. Being a grade behind in school
48. Adjusting to a new school
49. Taking the wrong subjects
50. Not spending enough time in study
51. Having no suitable place to study at home
52. Family not understanding what I have to do in school
53. Wanting subjects not offered by the school
54. Made to take subjects I don't like
55. Subjects not related to everyday life
56. Frequent headaches
57. Weak eyes
58. Often not hungry for my meals
59. Not eating the right food
60. Gradually losing weight
61. Too few nice clothes
62. Too little money for recreation
63. Family worried about money
64. Having to watch every penny I spend
65. Having to quit school to work
66. Not enough time for recreation
67. Not enjoying many things others enjoy
68. Too little chance to read what I like
69. Too little chance to get out and enjoy nature
70. Wanting more time to myself
71. No suitable places to go on dates
72. Not knowing how to entertain on a date
73. Too few dates
74. Afraid of close contact with the opposite sex
75. Embarrassed by talk about sex
76. Wanting a more pleasing personality
77. Not getting along well with other people
78. Worrying how I impress people
79. Too easily led by other people
80. Lacking leadership ability
81. Daydreaming
82. Being careless
83. Forgetting things
84. Being lazy
85. Not taking some things seriously enough
86. Parents making me go to church
87. Disliking church services
88. Doubting the value of worship and prayer
89. Wanting to feel close to God
90. Affected by racial or religious prejudice
91. Not living with my parents
92. Parents separated or divorced
93. Father or mother not living
94. Not having any fun with mother or dad
95. Feeling I don't really have a home
96. Needing to decide on an occupation
97. Needing to know more about occupations
98. Restless to get out of school and into a job
99. Can't see that school work is doing me any good
100. Want to be on my own
101. Not really interested in books
102. Unable to express myself well in words
103. Vocabulary too limited
104. Trouble with oral reports
105. Afraid to speak up in class discussions
106. Textbooks too hard to understand
107. Teachers too hard to understand
108. So often feel restless in classes
109. Too little freedom in classes
110. Not enough discussion in classes

111. Not as strong and healthy as I should be
112. Not getting enough outdoor air and sunshine
113. Not getting enough sleep
114. Frequent colds
115. Frequent sore throat
116. Wanting to earn some of my own money
117. Wanting to buy more of my own things
118. Needing money for education after high school
119. Needing to find a part-time job now
120. Needing a job during vacations
121. Nothing interesting to do in my spare time
122. Too little chance to go to shows
123. Too little chance to enjoy radio or television
124. Too little chance to pursue a hobby
125. Nothing interesting to do in vacation
126. Disappointed in a love affair
127. Girl friend
128. Boy friend
129. Deciding whether to go steady
130. Wondering if I'll find a suitable mate
131. Slow in making friends
132. Being timid or shy
133. Feelings too easily hurt
134. Getting embarrassed too easily
135. Feeling inferior
136. Moodiness, "having the blues"
137. Trouble making up my mind about things
138. Afraid of making mistakes
139. Too easily discouraged
140. Sometimes wishing I'd never been born
141. Wondering how to tell right from wrong
142. Confused on some moral questions
143. Parents old-fashioned in their ideas
144. Wanting to understand more about the Bible
145. Wondering what becomes of people when they die
146. Being criticized by my parents
147. Parents favoring a brother or sister
148. Mother
149. Father
150. Death in the family
151. Choosing best subjects to take next term
152. Choosing best subjects to prepare for college
153. Choosing best subjects to prepare for a job
154. Getting needed training for a given occupation
155. Wanting to learn a trade
156. Not getting studies done on time
157. Not liking school
158. Not interested in some subjects
159. Can't keep my mind on my studies
160. Don't know how to study effectively
161. Not enough good books in the library
162. Too much work required in some subjects
163. Not allowed to take some subjects I want
164. Not getting along with a teacher
165. School is too strict

166. Poor complexion or skin trouble
167. Poor posture
168. Too short
169. Too tall
170. Not very attractive physically
171. Living too far from school
172. Relatives living with us
173. Not having a room of my own
174. Having no place to entertain friends
175. Having no car in the family
176. Not being allowed to use the family car
177. Not allowed to go around with the people I like
178. So often not allowed to go out at night
179. In too few student activities
180. Too little social life
181. Being in love
182. Loving someone who doesn't love me
183. Deciding whether I'm in love
184. Deciding whether to become engaged
185. Needing advice about marriage
186. Being criticized by others
187. Being called "high-hat" or "stuck-up"
188. Being watched by other people
189. Being left out of things
190. Having feelings of extreme loneliness
191. Afraid to be left alone
192. Too easily moved to tears
193. Failing in so many things I try to do
194. Can't see the value of most things I do
195. Unhappy too much of the time
196. Can't forget some mistakes I've made
197. Bothered by ideas of heaven and hell
198. Afraid God is going to punish me
199. Troubled by the bad things other kids do
200. Being tempted to cheat in classes
201. Being an only child
202. Not getting along with a brother or sister
203. Parents making too many decisions for me
204. Parents not trusting me
205. Wanting more freedom at home
206. Deciding whether or not to go to college
207. Needing to know more about colleges
208. Needing to decide on a particular college
209. Afraid I won't be admitted to a college
210. Afraid I'll never be able to go to college
211. Trouble with mathematics
212. Weak in writing
213. Weak in spelling or grammar
214. Trouble in outlining or note taking
215. Trouble in organizing papers and reports
216. Classes too dull
217. Teachers lacking personality
218. Teachers lacking interest in students
219. Teachers not friendly to students
220. Not getting personal help from the teachers

221. Trouble with my hearing
222. Speech handicap (stuttering, etc.)
223. Allergies (hay fever, asthma, hives, etc.)
224. Glandular disorders (thyroid, lymph, etc.)
225. Menstrual or female disorders
226. Parents working too hard
227. Not having certain conveniences at home
228. Not liking the people in my neighborhood
229. Wanting to live in a different neighborhood
230. Ashamed of the home we live in
231. Wanting to learn how to dance
232. Wanting to learn how to entertain
233. Wanting to improve myself culturally
234. Wanting to improve my appearance
235. Too careless with my clothes and belongings
236. Going with someone my family won't accept
237. Afraid of losing the one I love
238. Breaking up a love affair
239. Wondering how far to go with the opposite sex
240. Wondering if I'll ever get married
241. Wanting to be more popular
242. Disliking someone
243. Being disliked by someone
244. Avoiding someone I don't like
245. Sometimes acting childish or immature
246. Being stubborn or obstinate
247. Tending to exaggerate too much
248. Having bad luck
249. Not having any fun
250. Lacking self-confidence
251. Sometimes lying without meaning to
252. Swearing, dirty stories
253. Having a certain bad habit
254. Being unable to break a bad habit
255. Lacking self-control
256. Clash of opinions between me and my parents
257. Talking back to my parents
258. Parents expecting too much of me
259. Wanting love and affection
260. Wishing I had a different family background
261. Lacking training for a job
262. Lacking work experience
263. Afraid of unemployment after graduation
264. Doubting ability to handle a good job
265. Don't know how to look for a job
266. Don't like to study
267. Poor memory
268. Slow in reading
269. Worrying about grades
270. Worrying about examinations
271. Teachers not considerate of students' feelings
272. Teachers not practicing what they preach
273. Too many poor teachers
274. Grades unfair as measures of ability
275. Unfair tests

276. Poor teeth
277. Nose or sinus trouble
278. Smoking
279. Trouble with my feet
280. Bothered by a physical handicap
281. Borrowing money
282. Working too much outside of school hours
283. Working for most of my own expenses
284. Getting low pay for my work
285. Disliking my present job
286. Too little chance to do what I want to do
287. Too little chance to get into sports
288. No good place for sports around home
289. Lacking skill in sports and games
290. Not using my leisure time well
291. Thinking too much about sex matters
292. Concerned over proper sex behavior
293. Finding it hard to control sex urges
294. Worried about sex diseases
295. Needing information about sex matters
296. Being too envious or jealous
297. Speaking or acting without thinking
298. Feeling that nobody understands me
299. Finding it hard to talk about my troubles
300. No one to tell my troubles to
301. Too many personal problems
302. Having memories of an unhappy childhood
303. Bothered by bad dreams
304. Sometimes bothered by thoughts of insanity
305. Thoughts of suicide
306. Sometimes not being as honest as I should be
307. Getting into trouble
308. Giving in to temptations
309. Having a troubled or guilty conscience
310. Being punished for something I didn't do
311. Friends not welcomed at home
312. Family quarrels
313. Unable to discuss certain problems at home
314. Wanting to leave home
315. Not telling parents everything
316. Not knowing what I really want
317. Needing to plan ahead for the future
318. Family opposing some of my plans
319. Afraid of the future
320. Concerned about military service
321. Getting low grades
322. Just can't get some subjects
323. Not smart enough
324. Afraid of failing in school work
325. Wanting to quit school
326. School activities poorly organized
327. Students not given enough responsibility
328. Not enough school spirit
329. Lunch hour too short
330. Poor assemblies

TOTAL. . . .

Third Step: Answer the following four questions.

QUESTIONS

1. Do you feel that the items you have marked on the list give a well-rounded picture of your problems?
.....Yes.No. Add anything further you may care to say to make the picture more complete.

2. How would you summarize your chief problems in your own words? Write a brief summary.

3. Would you like to have more chances in school to write out, think about, and discuss matters of personal concern to you?Yes.No. Please explain how you feel on this question.

4. If you had the chance, would you like to talk to someone about some of the problems you have marked on the list?Yes.No. If so, do you have any particular person(s) in mind with whom you would like to talk?Yes.No.

Senior Questionnaire

ADDRESS _____

MOTHER'S OCCUPATION _____

<u>YEARS</u>	<u>TOWN OR CITY</u>	<u>STATE</u>
(ex) 1966-1968	New York City	New York
(ex) 1962-1965	Richmond	Virginia

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Guidance Department

DENBIGH HIGH SCHOOL

GUIDANCE DEPARTMENT
SENIOR QUESTIONNAIRE

Age ____, Sex: ____ Male, ____ Female.

Are you living with: ____ Father, ____ Mother, ____ Stepfather,

(Check appropriate blocks) ____ Guardian ____ Stepmother

Father's Present Occupation _____ Rank _____
(if military)

Mother's Occupation (Housewife or other) _____

Father's Occupation is: (check one)

- ____ 1. Professional A: (chemist, lawyer, doctor, professor, business executive,
senior grade officer O-4 +
- ____ 2. Professional B: (office manager, elementary and high school teacher,
medium business owner, accountant, junior grade
officer, O-1,2,3
- ____ 3. Semiprofessional: (service manager, store manager, surveyor, insurance
agent, senior NCO E-7, 8, 9
- ____ 4. Clerical, Sales, Technician: (bank clerk or teller, post office
worker, draftsman, shipping clerk,
Sgt. E-5, E-6
- ____ 5. Skilled Worker (carpenter, electrician, machinist, policeman, mechanic,
Specialist 4 E-4
- ____ 6. Semiskilled Worker: (bus driver, truck driver, meat cutter, factory
worker, welder, watchman, PFC E-3
- ____ 7. Unskilled Worker: (farm helper, freight handler, dock worker, laborer,
Private E-1. 2

Your Father's Income is: (check one)

- | | |
|--------------------------|--|
| ____ 1. Inherited wealth | ____ 4. Salary (set amount per wk, or mo.) |
| ____ 2. Earned wealth | ____ 5. Wages (so much per hour) |
| ____ 3. Profits and fees | ____ 6. Private relief |
| | ____ 7. Public relief |

The Type of House You Live In Is: (check one)

- ☐ 1. Large house in good condition
- ☐ 2. Large house in medium condition
- ☐ 3. Large house in bad condition
- ☐ 4. Medium-sized house in medium condition;
- ☐ 5. Medium-sized house in good condition
- ☐ 6. Medium-sized house in bad condition
- ☐ 7. Small house in good condition
- ☐ 8. Small house in medium condition
- ☐ 9. Small house in bad condition
- ☐ 10. Apartment in regular apartment building
- ☐ 11. All houses in very bad condition; dwellings not intended for homes

Where Do You Live: (check one)

- ☐ 1. Very high; Gold Coast, Lake Circle Drive
- ☐ 2. High; better suburbs and apartment houses; houses with big yards, etc.
- ☐ 3. Above average; area all residential. Larger than average space around house; apartment areas in good condition,. etc.
- ☐ 4. Average; residential neighborhoods, no deterioration in area
- ☐ 5. Below average; area not quite holding its own, beginning to deteriorate, industry in area
- ☐ 6. Low; deteriorated neighborhood